

CentralTM

Semiconductor Corp.

FEATURES:

- SUPER MINIATURE CASE
- SPECIAL SELECTIONS AVAILABLE
- LOW COST
- SUPERIOR LOT TO LOT CONSISTENCY
- HIGH RELIABILITY
- "C" BEND CONSTRUCTION PROVIDES STRAIN RELIEF WHEN MOUNTED ON PC BOARD
- GLASS PASSIVATED CHIP

DESCRIPTION:

The CENTRAL SEMICONDUCTOR 1.0 Amp Surface Mount Fast Recovery Silicon Rectifier is a high quality, well constructed, highly reliable component designed for use in all types of commercial, industrial, entertainment, computer, and automotive applications where small size is required. The SMA case occupies 30% less board space than the SMB case. To order devices on 12mm Tape and Reel (5000/13" Reel), add TR13 suffix to part number.

MAXIMUM RATINGS: ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

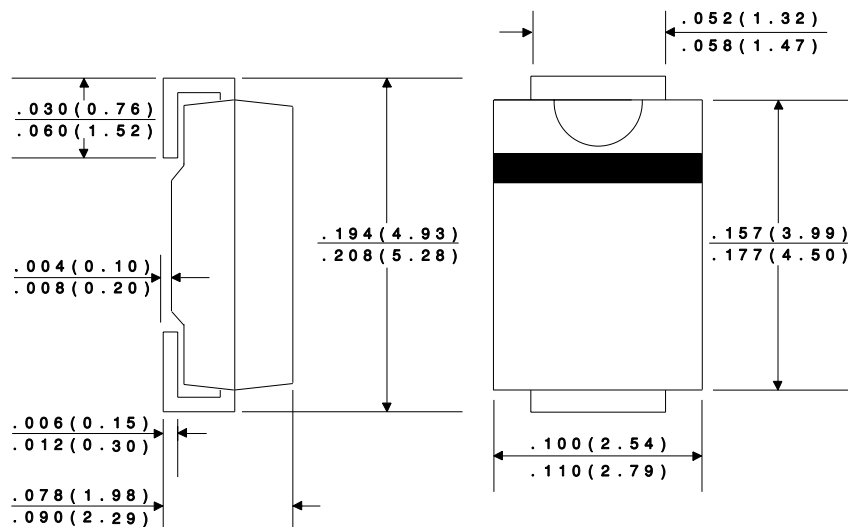
	SYMBOL	CMR1F -02M	CMR1F -04M	CMR1F -06M	CMR1F -10M	UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	200	400	600	1000	V
DC Blocking Voltage	V_R	200	400	600	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	140	280	420	700	V
Average Forward Current ($T_L=120^{\circ}\text{C}$) I_O				1.0		A
Peak Forward Surge Current (8.3ms) I_{FSM}				30		A
Operating and Storage						
Junction Temperature	T_J, T_{stg}		-65 to +150			$^{\circ}\text{C}$
Thermal Resistance	Θ_{JL}		30			$^{\circ}\text{C/W}$

ELECTRICAL CHARACTERISTICS: ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_R	$V_R=\text{Rated } V_{RRM}$			5.0	μA
I_R	$V_R=\text{Rated } V_{RRM}, T_A=125^{\circ}\text{C}$			200	μA
V_F	$I_F=1.0\text{A}$			1.3	V
C_J	$V_R=4.0\text{V}, f=1.0\text{MHz}$		15		pF

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
t_{rr}	$I_F=0.5A$, $I_R=1.0A$, Recover to 0.25A (CMR1F-02M, -04M)			150	ns
t_{rr}	$I_F=0.5A$, $I_R=1.0A$, Recover to 0.25A (CMR1F-06M)			250	ns
t_{rr}	$I_F=0.5A$, $I_R=1.0A$, Recover to 0.25A (CMR1F-10M)			500	ns

All dimensions in inches (mm).



DEVICE	MARKING CODE
CMR1F-02M	CF02M
CMR1F-04M	CF04M
CMR1F-06M	CF06M
CMR1F-10M	CF10M